

ABSTRACT

Mid-level combining methods and systems that combine benefits of high level  
5 and low level combining methods for generating HD (High Definition) radio signal  
outputs. The High level IBOC combining technique combines the RF outputs of an  
analog transmitter with an IBOC transmitter operating in a combined digital/analog  
mode, and can include a properly phased, identical, analog component of the signal  
feeding the analog transmitter. The low level combining technique includes splitting and  
10 phase adjustment for the purpose of feeding the analog signal simultaneously to an analog  
transmitter and an IBOC digital transmitter operating in a combined digital/analog mode.  
The mid-level combining method and system uses attributes of the high and low level  
methods and systems. Another mid-level combining method and system is for high  
transmitter power output (TPO). Additional methods and systems for converting existing  
15 transmitter room spaces to HD (High Definition) radio transmitters, without having to  
add onto existing rooms and buildings.